



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/694,841

10/29/2003

Toshinobu Ogatsu

Q76863

2499

23373

7590

04/29/2005

SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

FULLER, RODNEY EVAN

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/694,841

Applicant(s)

OGATSU, TOSHINOBU

Examiner

Rodney E. Fuller

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

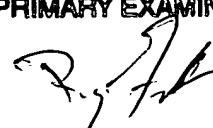
- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

RODNEY FULLER  
PRIMARY EXAMINER

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/29/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it exceeds the "150-words" limit. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue (US 5,685,232).

Regarding claims 1, 5, 7 and 10-15, Inoue discloses "a fixed base (Fig. 1, ref.# 8); a guiding device (Fig. 1, ref.# 4, 4a) on said fixed base (Fig. 1, ref.# 8); a movable

base (Fig. 1, ref.# 2a) disposed so as to move in a vertical direction (Fig. 1, Z-axis) with respect to the fixed base (Fig. 1, ref.# 8) by said guiding device (Fig. 1, ref.# 4, 4a); a first pressing device (Fig. 1, ref.# 5) fixed on the fixed base (Fig. 1, ref.# 8), said first pressing device (Fig. 1, ref.# 5) pressing said movable base (Fig. 1, ref.# 2a); a  $\Theta$  stage (Fig. 1, ref.# 2, 3,  $\Theta$ ) rotatably disposed on said movable base with the vertical direction as a rotation axis (Fig. 1, see center line showing  $\Theta$  rotation); a linear motor (Fig. 1, ref.# 11a) fixed on said fixed base (Fig. 1, ref.# 8); a contact bar (Fig. 1, side edge of ref.# 2a) disposed on said movable base (Fig. 1, ref.# 2a); a load control device (Fig. 2, ref.# 7g) controlling a load of pressing; and a controller (Fig. 2, ref.# 7g) controlling a pressing force by said first pressing device based on said load detected by a load sensor, wherein said first pressing device has a cylinder (Fig. 1, ref.# 2a) which is fixed on said fixed base and has a main pressurizing chamber (Fig. 2, area next to ref.# 7b) and a sub-pressurizing chamber (Fig. 2, area above ref.# 7b), a piston rod (Fig. 1, ref.# 2a) vertically moving in the main pressurizing chamber and the sub-pressurizing chamber, respectively, a main pressure controller (Fig. 2, ref.# 7g, 7f, 8d) controlling a pressure in said main pressurizing chamber, and a sub pressure controller (Fig. 2, ref.# 7g, 8d) controlling a pressure in said sub-pressurizing chamber.

Regarding claim 2, Inoue discloses "an adsorption stage disposed on said  $\Theta$  stage, said adsorption stage fixing a wafer (Fig. 1, ref.# W1)."

Regarding claim 3, Inoue discloses "wherein said load control device (Fig. 2, ref.# 7g) comprises said load sensor disposed on said linear motor (Fig. 1, ref.# 11a),

said load sensor detecting a load of pressing by said contact bar when said contact bar contacts said movable base.”

Regarding claim 4, Inoue discloses “wherein said guiding device comprises a first cross roller guide.” (Fig. 1, ref.# 4)

Regarding claim 6, Inoue discloses “wherein said driving member has a fixed coil fixed on the fixed base, and a movable magnet to be floated by a magnetic action with said fixed coil.” (Column 4, lines 22-23)

Regarding claim 8, Inoue discloses “wherein said guiding device comprises an air bearing.” (Fig. 2, ref.# 7; column 3, line 8)

Regarding claim 9, Inoue discloses “wherein said guiding device comprises a plurality of second pressing devices.” (Fig. 2, ref.# 7a, 7b)

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

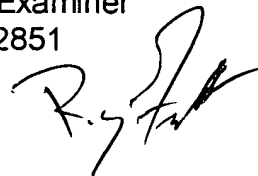
Cuijpers, et al. (US 6,473,161), Bisshopes, et al. (US 6,445,440), Miyajima, et al. (US 6,266,233), Loopstra, et al. (US 6,226,075), Jeanne, et al. (US 2005/0012920), Renskens, et al. (US 6,597,433) and Janssen, et al. (US 6,597,429) each discloses a wafer support device with a fixed base, a guiding device on the fixed base and a movable base.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E. Fuller whose telephone number is 571-272-2118. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney E Fuller  
Primary Examiner  
Art Unit 2851

A handwritten signature in black ink, appearing to read 'R. E. Fuller', is written over the printed name of the examiner.

April 27, 2005